

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

ORDER 85-54

NPDES PERMIT NO. CA 0027774

MARINE WORLD - AFRICA USA AND
CAMPEAU CORPORATION CALIFORNIA
REDWOOD CITY, SAN MATEO COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, hereinafter Board, finds that:

1. Marine World-Africa USA is the operator of an amusement park and Campeau Corporation California is the owner of the land at the park site.
2. Marine World - Africa USA and Campeau Corporation California, hereinafter dischargers, by application dated June 23, 1983, have applied for reissuance of waste discharge requirements and a permit to discharge wastes under the National Pollutant Discharge Elimination System.
3. The dischargers discharged an annual average of 1.99 mgd of wastewater containing pollutants during 1983 into Belmont Slough, a water of the United States, at a point approximately 2,000 feet northeast of the intersection of Ralston Avenue and Bayshore Freeway (U. S. Highway 101).

Water from the Belmont Slough enters the lagoon system through two tidal vaults at the southeast end of the park. The water flows through the system and is discharged back into Belmont Slough at the northwest end of the park. At times of flooding, the lagoon level will rise and actuate flood control switches which will start the discharge pumps and maintain the lagoon at a desired level. Their designed flow is 3.0 mgd.

Terrestrial animal areas which border the lagoon are cleaned daily to prevent any animal wastes from entering the lagoon system. There are ongoing repair and maintenance, including rip-rapping of the berms which surround the terrestrial animal areas to help stop runoff and shoreline erosion. Intake and discharge pipes are cleaned twice a year to maintain good water flow through the lagoon system.

4. The discharge is presently governed by Waste Discharge Requirements, Order No. 79-18, which allow discharge to Belmont Slough.

5. The Regional Board adopted a revised Water Quality Control Plan for the San Francisco Bay Region (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for Belmont Slough and contiguous waters.
6. The beneficial uses of Belmont Slough and contiguous waters are:
 - . Water contact recreation
 - . Non-contact water recreation
 - . Preservation of rare and endangered species
 - . Estuarine habitat
 - . Salt water marsh
 - . Fish spawning
 - . Wildlife habitat
7. This Order serves as an NPDES permit, adoption of which is exempt from the provisions of Chapter 3 (commencing with Section 21100) of Division 13 of the Public Resources Code (CEQA) pursuant to Section 13389 of the California Water Code.
8. The dischargers and interested agencies and persons have been notified of the Board's intent to reissue requirements for the existing discharge and have been provided with the opportunity for a public hearing and the opportunity to submit their written views and recommendations.
9. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that Marine World - Africa USA and Campeau Corporation California in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, and the provisions of the Clean Water Act as amended and regulations and guidelines adopted thereunder, shall comply with the following:

A. Discharge Prohibitions.

1. The discharge of wastewater containing any excrement from confined terrestrial animal areas to waters of the State is prohibited.
2. The discharge of wastewater containing domestic sewage to waters of the State is prohibited.
3. The discharge of a wastewater containing diatomaceous earth to waters of the State is prohibited.

4. The application of persistent or cumulative biocides except where net environmental benefit can be demonstrated to the satisfaction of the Regional Board is prohibited.

B. Lagoon Water Limitations

1. Adequate circulation and mixing, or other methods of water quality management, shall be provided so as to maintain the following levels of water quality at all points within the lagoon system:
 - a. Dissolved Oxygen 5.0 mg/l minimum.
 - b. Chlorophyll 'a' Less than 50 ug/l increase above influent concentration.
2. Water quality within the lagoon system shall be managed so as to prevent the presence of toxic or other deleterious substances in concentrations or quantities which will cause deleterious effects on aquatic biota, wildlife, or waterfowl, or which render any of these unfit for human consumption either at levels created in the receiving waters or as a result of biological concentration.

C. Effluent Limitations

1. The discharge of an effluent in excess of 0.0 mg/l of chlorine residual (Instantaneous Maximum) is prohibited.
2. The discharge shall not have a pH of less than 6.5 nor greater than 8.5.

D. Receiving Water Limitations

1. The discharge of waste shall not cause the following conditions to exist in waters of the State at any place:
 - a. Visible, floating, suspended, or deposited oil or other products of petroleum origin;
 - b. Floating, suspended or deposited macroscopic particulate matter or foam;
 - c. Bottom deposits or aquatic growths;
 - d. Alteration of apparent color beyond present natural background levels;

- e. Increased turbidity above background levels by more than the following:

<u>Receiving Water Background</u>	<u>Incremental Increase</u>
<50 units (JTU)	5 units, maximum
50-100 units	10 units, maximum
>100 units	10% of background, maximum

2. The discharge of waste shall not cause the following limits to be exceeded in waters of the State in any place within one foot of the water surface:
 - a. pH Variation from natural ambient pH by more than 0.5 pH units.
 - b. Dissolved Oxygen 5.0 mg/l minimum.
Median of any three consecutive months shall not be less than 80% saturation. When natural factors cause lesser concentration(s) than those specified above, then this discharge shall not cause further reduction in the concentration of dissolved oxygen.
 - c. Dissolved Sulfide 0.1 mg/l maximum.
 - d. Un-ionized ammonia 0.025 mg/l as N annual median
0.4 mg/l as N maximum
 - e. A bacterial quality in excess of those limits prescribed in Section 7958, Title 17 of the California Administrative Code at any place within one foot of the surface of the receiving water. Whenever this limitation is not met in the receiving water, compliance may be demonstrated in the effluent.
3. The discharge shall not cause a violation of any applicable water quality standard for receiving waters adopted by the Board or the State Water Resources Control Board as required by the Clean Water Act and regulations adopted thereunder. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Clean Water Act, or amendments thereto, the Board will revise and modify this Order in accordance with such more stringent standards.

E. Provisions

1. The requirements prescribed by this Order supersede the requirements prescribed by Order No. 79-18, adopted by the Board on February 20, 1979. Order No. 79-18 is hereby rescinded.
2. Where concentration limitations in mg/l are contained in this permit, the following mass emission limitations shall also apply as follows:

Mass Emission Limit in lbs/day = Concentration limit in mg/l X
8.34 X Actual Flow in mgd averaged over the time interval to
which the limit applies.

3. The dischargers shall comply with all sections of this Order immediately upon adoption.
4. The dischargers shall review and update by December 31 annually its contingency plan as required by Board Resolution No. 74-10. The discharge of pollutants in violation of this Order where the dischargers have failed to develop and/or implement a contingency plan will be basis for considering such discharge a willful and negligent violation of this Order pursuant to Section 13387 of the California Water Code.
5. The dischargers shall comply with the Self-Monitoring Program as adopted by the Board and as may be amended by the Executive Officer.
6. The dischargers shall comply with all items of the attached "Standard Provisions and Reporting Requirements," dated April 1977, except A.5, A.12, and B.5. Standard Provision C.2. is revised to read as follows:

"2. The "30-day, or 7-day, average" discharge is the total discharge by weight during 30, or 7 consecutive calendar day periods, respectively, divided by the number of days in the period that the facility was discharging. Where less than daily sampling is required by this permit, the 30-day, or 7-day, average discharge shall be determined by the summation of all the measured discharges by weight divided by the number of days during the 30, or 7 consecutive calendar day period when the measurements were made. For other than 7-day or 30-day periods, compliance shall be based on the average of all measurements made during the specified period."

7. This Order expires May 15, 1990. The dischargers must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9 of the California Administrative Code not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
8. This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Clean Water Act or amendments thereto, and shall become effective ten (10) days after date of its adoption provided the Regional Administrator, Environmental Protection Agency, has no objection. If the Regional Administrator objects to its issuance, the permit shall not become effective until such objection is withdrawn.

I, Roger B. James, Executive Officer do hereby certify the foregoing is a full, true and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on May 15, 1985.

Roger B. James
Executive Officer

Attachments:

Standard Provisions & Reporting
Requirements, April 1977
Self Monitoring Program
Resolution 74-10

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
SAN FRANCISCO BAY REGION

SELF-MONITORING PROGRAM
FOR

Marine World-Africa USA and
Campeau Corporation California

Redwood City, San Mateo County

NPDES NO. CA 0027774

ORDER NO. 85-54

CONSISTS OF

PART A

AND

PART B

PART B

I. DESCRIPTION OF SAMPLING STATIONS

A. INFLUENT

<u>Station</u>	<u>Description</u>
I-1	At any point in the intake facilities prior to discharge into the lagoon system.

B. EFFLUENT

<u>Station</u>	<u>Description</u>
E-001	At any point in the spillway or outfall west of the discharge pumps, before the discharged wastewater contacts Belmont Slough.

C. RECEIVING WATERS

<u>Station</u>	<u>Description</u>
C-1	At a point in the middle of Belmont Slough, located approximately 500 feet south of the point of discharge.
C-2	At a point in the middle of Belmont Slough, located at the point of discharge.
C-3	At a point in the middle of Belmont Slough, located approximately 500 feet north of the point of discharge.

D. LAND OBSERVATIONS

<u>Station</u>	<u>Description</u>
L-1 through L-'n'	Located at points along the perimeter of the dikes enclosing the refuse storage area east of the lagoon, at equidistant intervals not to exceed 100 feet. (A sketch showing the locations of these stations will accompany each report.)

E. LAGOON WATERS

<u>Station</u>	<u>Description</u>
LG-1	In the middle of the lagoon channel at the bridge crossing between the park's entrance and "Safari Square Island."

<u>Station</u>	<u>Description</u>
LG-2	In the middle of the lagoon channel at the bridge crossing between "Safari Square Island" and "Oceana Island".
LG-3	In the middle of the lagoon channel at the bridge crossing between the mainland and the "Oceana Island".
LG-4	In the middle of the lagoon channel at the main overpass between "Oceana Island" and "Paradise Island".

II SCHEDULE OF SAMPLING, MEASUREMENT AND ANALYSES

The schedule of sampling, measurements and analyses shall be as given in Table I.

III MODIFICATION OF PART A, DATED 1/78

- A. Exclusions: Paragraphs C.3., C.4., C.5.c., C.5.e., D.1., D.2.a., E.1. and F.2.
- B. Modifications: Paragraph D.2.b. is revised to specify that grab samples of the effluent shall be collected after the pumps have been on at least ten minutes to insure that the samples are representative.

I, Roger B. James, Executive Officer, hereby certify that the foregoing Self-Monitoring Program:

- 1. Has been developed in accordance with the procedures set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-54.
- 2. Is effective on the date indicated below.
- 3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

Roger B. James
Executive Officer

Effective Date May 15, 1985

Attachments:
Table I

TABLE I
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

NPDES # CA0027774

ORDER # 85-54

SAMPLING STATIONS	I-1	E-001	C	L	LG
TYPE OF SAMPLES	G	G	G	O	G
Flow Rate (mgd)		D			
Biochemical Oxygen Demand (mg/l & lbs/day)					
Settleable Solids (ml/l-hr)					
Total Suspended Solids (mg/l & lbs/day)					
Oil & Grease (mg/l & lbs/day)					
Chlorine Residual (mg/l)		W			
pH (units)	W	W	2W		
Fecal Coliform (MPN/100 ml)	W	2/W	$\frac{1}{2/W}$		
Total Coliform (MPN/100 ml)	W	2/W	$\frac{1}{2/W}$		
Turbidity (Jackson Turbidity Units)			2W		
Dissolved Oxygen (mg/l)			2W	M	
Temperature (°F)					
Total Organic Nitrogen (mg/l & lbs/day)	M	M			
Ammonia Nitrogen (mg/l & lbs/day)	M	M			
Nitrate Nitrogen (mg/l & lbs/day)	M	M			
Total Phosphate (mg/l & lbs/day)					

TABLE I (Continued)
SCHEDULE FOR SAMPLING, MEASUREMENTS, AND ANALYSES

NPDES # CA0037774

ORDER # 85-54

SAMPLING STATIONS	I-1		E-001		C	L	LG		
TYPE OF SAMPLES		G		G	G	O	G		
Bottom Sediment Analyses and Observations									
All Applicable Standard Observations				W		W	M		
Chlorophyll 'a' <u>2/</u> (ug/l)		M					M		

LEGEND FOR TABLE

TYPE OF SAMPLES

G = grab sample
O = observation

TYPES OF STATIONS

I = intake and/or water supply stations
E = waste effluent stations
C = receiving water stations
L = basin and/or pond levee stations
LG = Lagoon stations

FREQUENCY OF SAMPLING

D = once each day
M = monthly
2/W = 2 days per week
2W = every 2 weeks

NOTES FOR TABLE

1/ To be monitored only at Station C-2. Samples shall be taken only during times of discharge and at approximately the same time as effluent samples are taken. A minimum of 10 samples shall be taken each calendar month.

2/ To be monitored only during the period April 1 through October 1.